

2D-Inclination Sensor with Voltage Interface

IS2A 30 P55

Characteristics:

- **2- dimensional inclination sensor with measurement range: $\pm 30^\circ$**
- **0.5 V ... 4.5 V voltage interface**
- **Robust, UV- resistant plastic housing**
- **Suitable for industrial use:**
 - Temperature range: $-40\text{ }^\circ\text{C} \dots +80\text{ }^\circ\text{C}$
 - Degree of protection: IP65/67



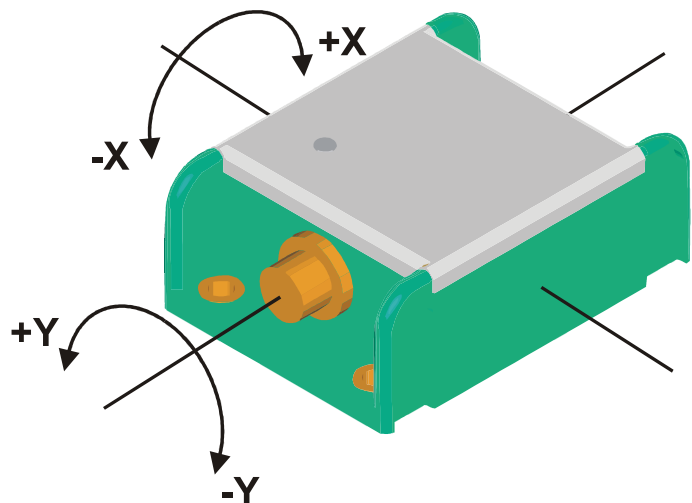
Figure similar

The sensor IS2A30P55 is suitable for two-channel measurement of inclination angles. The full-scale readings are calibrated factory-made at $25\text{ }^\circ\text{C}$.

The compact and robust plastic housing makes the sensor a suitable angle measurement device in rough surroundings for different applications in industry and automotive technology.

Applications:

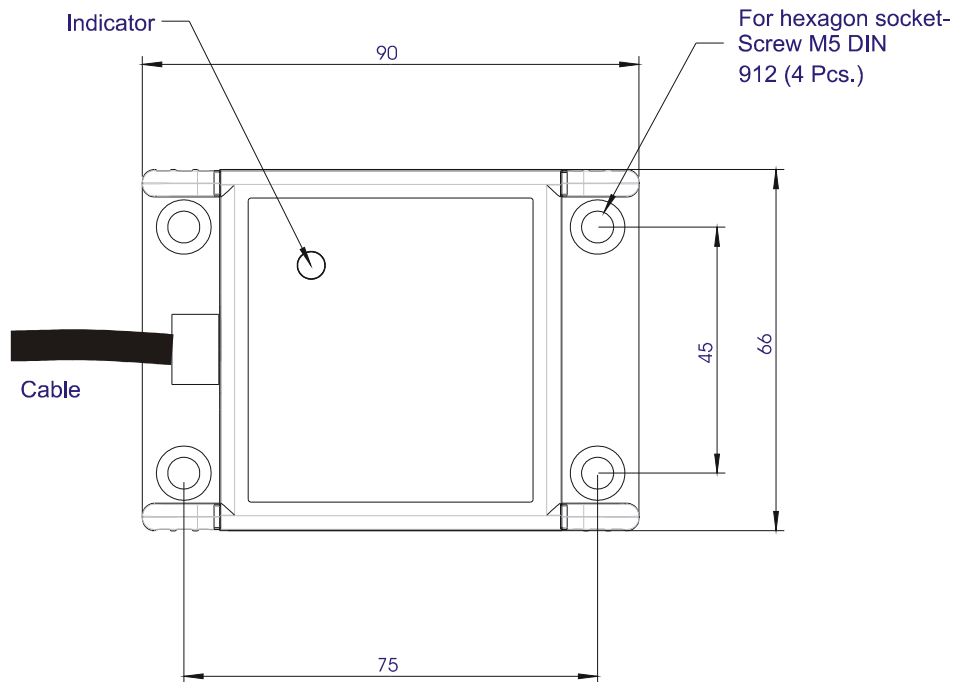
- **Tracking Systems (Renewable energy)**
- **Agricultural and forestry machines**
- **Utility vehicles**
- **Crane and hoisting technology**



Technical Data:

General Parameters: Ta = 25 °C	
Measurement axes	2 axes
Measurement range	±30°
Resolution (at zero point)	0.04°
Angle tolerances, max (in measurement range)	typ. ±0.3°
Temperature coefficient (zero point)	max. ±0.03 °/K
Cut-off frequency	typ. 18 Hz (other values on request)
Operating temperature	-40 °C ... +80 °C
Characteristics	
Interface	voltage output 0.5 V ... 4.5 V
Calculation formula Angle value [°]	$\arcsin \left[\left(\frac{U_{\text{meas}} - 2.5\text{V}}{2\text{V}} \right) * \text{sinrange value} \right]$
Electrical Parameters	
Supply voltage	9 V DC ... 18 V DC
Current consumption	max. 50 mA
Mechanical Parameters	
Connector	4- pole DEUTSCH- male connector (1.5 m cable, 4 x 0.34 mm ²)
Degree of protection	IP65/67
Shock survival	max. 3 500 g
Dimensions	65 mm x 90 mm x 35 mm
Mass	about 200 g

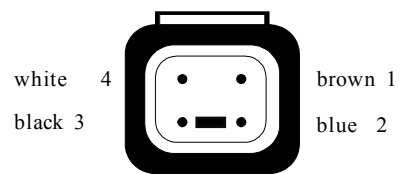
Dimensioned Drawing:



Dimensions in mm

Cable Allocation:

Cable	Allocation
1	Supply voltage (V+)
2	GND-supply (V- / GND)
3	Sensor signal X-Axis (X-OUT)
4	Sensor signal Y-Axis (Y-OUT)



View to contacts

Ordering Information:

Product type	Description	Article Number
IS2A 30 P55	2-dimensional, $\pm 30^\circ$, 0.5 V ... 4.5 V	PR-24344-00